

CLAIMS

What is claimed is:

1. A blade assembly for a laryngoscope including a handle, said blade assembly comprising:

base for coupling to the handle;

an elongated blade secured to the base, said elongated blade having a proximal end, a distal end, an upper surface, and a lower surface, said lower surface of said elongated blade being secured to said base at said proximal end;

a first guide tube secured to said upper surface of said elongated blade and having a proximal end and a distal end; and

a second guide tube secured to said upper surface of said elongated blade adjacent said first guide tube and having a proximal end and a distal end,

said first and second guide tubes being constructed and arranged to direct tubes extended therethrough into the oral cavity of a patient.

2. The blade assembly of claim 1, wherein said first guide tube is substantially straight and said second guide tube is curved.

3. The blade assembly of claim 2, wherein said elongated blade is curved.

4. The blade assembly of claim 1, further comprising a light attached to said elongated blade.

5. The blade assembly of claim 1, further comprising a tongue deflector having a portion extending in a direction transverse to the upper

surface of the elongated blade along a marginal edge segment of said elongated blade.

6. The blade assembly of claim 1, wherein said first and second guide tubes are oriented at different angles of attack with respect to said elongated blade so that when said elongated blade is placed atop the tongue of a patient to effect laryngeal suspension, said first and second guide tubes direct respective tubes extended therethrough into different regions of the patient's oral cavity.

7. A handle for a laryngoscope including a blade connected to an end of said handle for effecting laryngeal suspension, said handle comprising ergonomic features for conforming to the hand of a user grasping said handle.

8. The handle of claim 7, wherein said ergonomic features comprise:
a hump formed along one side of said handle adjacent to the end of said handle to which the blade is connected, said hump conforming to the palm and heel of a hand grasping said handle with a bottom end of the grasping hand closest to the blade,

finger contours disposed along a side of said handle generally opposite said hump, and

a narrow portion disposed adjacent an end of said handle opposite the blade for conforming to the web of the hand between the thumb and index finger.

9. A laryngoscope comprising:
a handle to be grasped by a hand of a user;
a blade connected to one end of said handle and extending generally transverse to said handle;

a tube extension/retraction mechanism carried on said laryngoscope and constructed and arranged to effect powered extension or retraction of a tube along said blade into or from the oral cavity of a patient; and

a trigger located on said handle for providing finger actuated control of said tube extension/retraction mechanism.

10. The laryngoscope of claim 9, wherein said handle has a channel formed therein through which a tube is extended from an end of said handle opposite the blade to the end of said handle to which the blade is connected, and wherein said tube extension/retraction mechanism is disposed adjacent said channel for effecting powered movement of a tube within said channel, said laryngoscope further comprising guide structure for redirecting a tube emerging from the end of said channel into a direction along said blade generally transverse to a longitudinal direction of said channel.

11. The laryngoscope of claim 10, wherein said tube extension/retraction mechanism comprises:

a drive wheel disposed adjacent said channel for engaging a tube disposed in said channel such that rotation of said wheel causes corresponding longitudinal movement of the tube within said channel; and

a motor to which said drive wheel is coupled for rotationally driving said drive wheel.

12. The laryngoscope of claim 11, further comprising a guide wheel disposed adjacent said channel generally opposite side drive wheel for engaging the tube disposed in said channel such that the tube is held between the drive wheel and the guide wheel.

13. A laryngoscope comprising:

a handle to be grasped by a hand of a user, said handle comprising ergonomic features for conforming to the hand of a user grasping said handle.;

a blade assembly connected to one end of said handle and extending generally transverse to said handle; said blade assembly comprising:

base for coupling said blade assembly to said handle;

an elongated blade secured to said base, said elongated blade having a proximal end, a distal end, an upper surface, and a lower surface, said lower surface of said elongated blade being secured to said base at said proximal end;

a first guide tube secured to said upper surface of said elongated blade and having a proximal end and a distal end; and

a second guide tube secured to said upper surface of said elongated blade adjacent said first guide tube and having a proximal end and a distal end,

said first and second guide tubes being constructed and arranged to direct tubes extended therethrough into the oral cavity of a patient;

a tube extension/retraction mechanism carried on said laryngoscope and constructed and arranged to effect powered extension or retraction of a tube along said blade through a one of said first and second guide tubes into or from the oral cavity of a patient; and

a trigger located on said handle for providing finger actuated control of said tube extension/retraction mechanism.

14. The laryngoscope of claim 13, wherein said ergonomic features comprise:

a hump formed along one side of said handle adjacent to the end of said handle to which said blade assembly is connected, said hump conforming to the palm and heel of a hand grasping said handle with a bottom end of the

grasping hand closest to said blade assembly,

finger contours disposed along a side of said handle generally opposite said hump, and

a narrow portion disposed adjacent an end of said handle opposite said blade assembly for conforming to the web of the hand between the thumb and index finger.

15. The laryngoscope of claim 13, wherein said first and second guide tubes are oriented at different angles of attack with respect to said elongated blade so that when said elongated blade is placed atop the tongue of a patient to effect laryngeal suspension, said first and second guide tubes direct respective tubes extended therethrough into different regions of the patient's oral cavity.

16. The laryngoscope of claim 13, wherein said handle has a channel formed therein through which a tube is extended from an end of said handle opposite said blade assembly to the end of said handle to which said blade assembly is connected, and wherein said tube extension/retraction mechanism is disposed adjacent said channel for effecting powered movement of a tube within said channel.

17. The laryngoscope of claim 16, wherein said tube extension/retraction mechanism comprises:

a drive wheel disposed adjacent said channel for engaging a tube disposed in said channel such that rotation of said wheel causes corresponding longitudinal movement of the tube within said channel; and

a motor to which said drive wheel is coupled for rotationally driving said drive wheel.

18. The laryngoscope of claim 13, further comprising a bayonet connection for releasably connecting said blade assembly to said handle.

19. The laryngoscope of claim 18, wherein said bayonet connection comprises:

a male part having a cylindrical extension, radial tabs, and a collar; and

a female part having a circular opening, radial slots, and a collar, said circular opening of said female part being constructed and arranged to receive said cylindrical extension of said male part with said radial tabs aligned with said radial slots and said collar of said male part engaged with said collar of said female part.

20. The laryngoscope of claim 19, wherein said male part is connected to said blade assembly, and said female part is connected to said handle.